

REMARKS/ARGUMENTS

I. Status of the Claims

Prior to entry of this amendment, claims 37-48 were pending in the application, with claim 48 withdrawn as being considered drawn to a non-elected invention. Upon entry of this amendment, claims 37 and 40-47 are amended without prejudice or disclaimer and new claims 49-70 added. After entry of this amendment, claims 37-70 are thus pending, with claims 37-47 and 49-70 the subject of examination.

The amended and new claims find support throughout the specification, including, for example, at page 13, lines 1-9; page 16, line 23 to page 17, line 9; page 33, lines 7-9; and page 51, line 15 to page 53, line 18.

II. Election/Restrictions

Applicants confirm their telephonic election of the claims of Group I, namely claims 37-48.

III. Information Disclosure Statement

Applicants received the checked off copies of the 1449 IDS forms submitted with the original IDS on July 18, 2002 and the supplemental IDS submitted September 6, 2002, and thank the Examiner for considering the documents listed in these two IDS's. In reviewing the checked off copy of the July 18, 2002 IDS, Applicants noted, however, that the Examiner had not fully checked off the references on page 2. This appears to be an oversight, with the Examiner apparently simply forgetting to draw a line connecting his initials on the first and last lines as on other pages of the IDS. It is also noted that the documents cited on this page have not been crossed out, which would be the case if the Examiner had not considered the documents. Nonetheless, to confirm that these documents have been considered by the Examiner, Applicants request that the Examiner provide a checked off copy of this page of the original IDS with the next Office communication.

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It is further noted that the IDS submitted on April 28, 2003 has not yet been considered by the Examiner because it was submitted shortly after receipt of the first Office Action. Since this IDS was filed before a final rejection or the mailing of a Notice of Allowance and the requisite fee was timely filed, it is requested that this IDS be considered before issuance of the next Office communication.

IV. Rejection of Claims under 35 U.S.C. § 112

Claims 37-47 are rejected under 35 U.S.C. § 112, first and second paragraphs because the term "variant" is said 1) to include no structural limitation such that one of ordinary skill could reasonably conclude that applicants had possession of the claimed invention at the time the application was filed as required to satisfy the written description requirement, and 2) to render these claims unclear, respectively.

With respect to point one, under the Written Description Guidelines, a claim directed to a genus (e.g., claim 37) can satisfy the written description requirement by, for example, disclosing "relevant identifying characteristics" (Fed. Reg., vol. 66, page 106 (January 5, 2001)). Examples of such characteristics are said to include: (i) structures or other chemical or physical properties, (ii) functional characteristics coupled with a known or disclosed correlation between structure and function, or (iii) combinations of such identifying characteristics.

The specification and currently pending claims satisfy the written description requirement by disclosing several relevant identifying characteristics. For example, independent claim 37 as amended defines certain polypeptides of the presently claimed invention as having greater than 90% sequence identity to SEQ ID NO:2 or as fragments thereof, thus satisfying the structural criterion set forth in (i). The claims and specification satisfy the criterion of (ii) by defining certain of the presently claimed proteins both structurally and functionally with respect to a disclosed relationship between structure and function. Specifically, claim 37 now states that the some of the presently claimed CCX CKR polypeptides can separately bind at least two of the chemokines recited in section (a) of the claim in the absence of the test compound (i.e., a functional characteristic). This claim also recites that proteins having this activity have at least

90% sequence identity to SEQ ID NO:2 or are fragments thereof (structure) (see, e.g., claim 37 and page 13, lines 1-9; and page 17, lines 4-7). The specification and the claims thus provide the identifying characteristics necessary to satisfy the written description requirements as set forth in the Written Description Guidelines.

Similar structural and functional characteristics and interrelationships are recited in independent claim 55. Structurally, the CCX CKR polypeptides are said to comprise an amino acid sequence that has at least 90% sequence identity to SEQ ID NO:2 or to be a fragment thereof that is at least 100 amino acids in length. This claim also functionally defines such polypeptides as those that can bind at least one of the chemokines listed in section (a) of the claim in the absence of test compound.

The present claims are also consistent with Example 14 of the "Synopsis of Application of Written Description Guidelines" (Synopsis)," which provides examples of the type of analysis used by the Office in evaluating compliance with the written description requirement. The claim in Example 14 reads as follows:

"A protein having SEQ ID NO:3 and variants thereof that are at least 95% identical to SEQ ID NO:3 and catalyze the reaction of A to B."

Because the claim defines the genus in functional terms that are related to a disclosed correlation between structure and function (see Written Description Guideline criteria above), the Synopsis concludes that the disclosure meets the written description requirements with respect to this exemplary claim. Current independent claims 37 and 55 are in the same format as this claim (i.e., they too link functional characteristics to structural characteristics) and, as noted above, this relationship is fully supported by the specification (see, e.g., page 13, lines 1-9; and page 17, lines 4-11). So by analogy, current claims 37 and 55 satisfy the written description requirements for the same reasons as the exemplary claim presented in Example 14 of the Synopsis.

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Defining the presently claimed polypeptides both with respect to sequence and function also addresses the concern regarding lack of clarity under section 112, second paragraph.

So for all these reasons it is thus submitted that the rejections under the first and second paragraphs of section 112 should be withdrawn.

II. Claim Rejections under 35 U.S.C. 102

Claims 37-40 and 44 are said to be anticipated by U.S. Patent 6,110,695 to Gunn et al. ("Gunn"). In response it is noted that Gunn is not believed to discuss polypeptides with the sequence and chemokine binding characteristics of the CCX CKR polypeptides as currently defined in section (a) of either claim 37 or 55.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 303-571-4000.

Respectfully submitted,



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